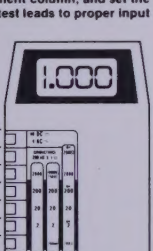
FLUKE 8020A Operator's Guide

WARNING
(See other side.)

SELECTING A FUNCTION AND RANGE

Use the following table to identify the desired measurement column, and set the pushbutton switches as indicated (see notes). Connect test leads to proper input terminals.

SWITCHES	DESIRED MEASUREMENT								
	Volts		Ω kΩ MΩ	mA		1/Ω			
PUSH ON-PUSH OFF / PUSH-TO-SELECT	AC	DC	HI	AC	DC	200 nS	2 mS	Diode Test	
	■	—	—	■	—	—	—	—	AC/DC
	—	—	□	—	—	■	■	□	20MΩ
	□	□	□	□	□	■	—	—	2000
	□	□	□	□	□	—	—	□	200
	□	□	□	□	□	—	—	—	20
	□	□	□	□	□	—	■	□	2
	□	□	□	—	—	—	—	—	200Ω/mV
	—	—	■	—	—	■	■	■	mA/V,kΩ/nS
TEST LEADS	HI	HI	HI	—	—	HI	HI	HI(+)	
	—	—	—	HI	HI	—	—	—	
	LO	LO	LO	LO	LO	LO	LO	LO(-)	



NOTES:

- ■ = IN (Conductance (1/Ω) ranges require depression of two range switches simultaneously)
- — = OUT
- □ = DEPRESS ONE TO SELECT DESIRED RANGE
- **HI** = RED, HIGH INPUT LEAD
- **LO** = BLACK, LOW INPUT LEAD

SUMMARY OF INPUT OVERLOAD LIMITS

CAUTION

The COMMON input circuit should always be connected to the lowest of the two measurement potentials, and never greater than 500V dc/rms ac.

SELECTED FUNCTION	SELECTED RANGE	INPUT CONNECTIONS	MAX INPUT OVERLOAD
V dc or V ac	200 mV, 2V, 20V, 200V, 750V ac, 1000V dc	V/KΩ and COMMON	1000V dc or peak ac on dc ranges. 1000V dc or 750V rms on ac ranges — 15 seconds max on 200 mV ac range.
mA dc or mA ac	2 mA, 20 mA, 200 mA, 2000 mA	mA and COMMON	2A max. Fuse protected in circuits with open circuit voltage ⩽ 250V dc/rms ac. Do not use above 250V.
Ω, kΩ, MΩ, S(1/Ω)	200Ω, 2 kΩ 20 kΩ, 200 kΩ, 2000kΩ, 20MΩ, 200 nS, 2 mS	V/KΩ and COMMON	500V dc or rms

BATTERY/FUSE TYPES

BATTERY — 9V carbon-zinc (M1604 Mallory or equivalent) or alkaline (MN1604 Mallory or equivalent).

FUSE — 2A, 250V rating. Use only AGX 2.

Litho in U.S.A. 2/79 JF P/N 515817

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WARNING

REMOVE INPUT SIGNAL AND TEST LEADS FROM 8020A INPUT TERMINALS BEFORE OPENING THE BATTERY COMPARTMENT OR OTHERWISE ACCESSING OR TOUCHING THE FUSE AND/OR BATTERY. DO NOT OPERATE THE INSTRUMENT UNLESS BATTERY COVER IS IN PLACE AND FULLY CLOSED.

ACCURACY SPECIFICATIONS

1 year, 18° to 28°C (64° to 82°F)

VOLTS DC (all ranges) ..... ±(0.1% of reading +1 digit)

VOLTS AC

RANGE	45 Hz to 1 kHz	1 kHz to 2 kHz	2 kHz to 5 kHz
200 mV	±(0.75% of reading+2 digits)	±(1.5% of reading+3 digits)	±(5% of reading +5 digits)
2V			
20V			
200V			
750V	±(1% of reading +2 digits		

RESISTANCE

2 kΩ thru 2000 kΩ Ranges .... ±(0.1% of reading +1 digit)
200Ω Range ..... ±(0.2% of reading +3 digits)
20 MΩ Range ..... ±(2% of reading +1 digit)

CURRENT DC (all ranges) ±(0.75% of reading +1 digit)

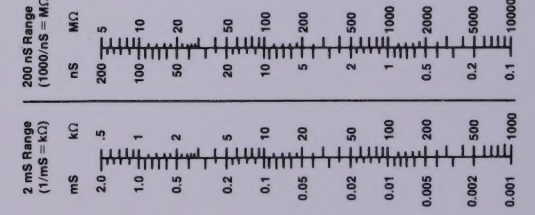
CURRENT AC

2 mA (45 Hz to 450 Hz) ..... ±(2% of reading +2 digits)
20 mA, 200 mA, 2000 mA (45 Hz to 1 kHz) ..... ±(1.5% of reading +2 digits)

CONDUCTANCE*

2 mS Range ..... ±(0.2% of reading +1 digit)
200 nS Range ..... ±(2% of reading +10 digits)

CONDUCTANCE-TO-RESISTANCE CONVERSION



**S = Siemens = 1/Ω = International unit of conductance (formerly known as mho).*